

# **The Effect of Strikes and Lockouts on the Strength of Professional Sports Leagues**

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By

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## Abstract

Most, if not all, professional sports leagues have adopted an internal structure that provides much economic success, but that creates a division within each league composed of two sides: the owners of the teams and the players on those teams. Due to this division and the creation of goals that usually contrast with each other, there has long been strife between the two factions. In most cases both parties are able to come together and formulate an agreement, but on rare occasions one group decides that it is time to act on their dissatisfaction, anger, or even greed and refuse to participate in these negotiations. This generally leads to an owners' lockout or a players' strike, similar to those found in other industries. After an extensive meta-analysis, conducted using data and research from past sports strikes and lockouts, I have found that the effects of a work stoppage on the strength of a league is not uniform, that players salaries generally are negatively affected, and that players most often lose the most as a result.

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## Fields of Study

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## Chapter 1: Introduction

The first professional sports leagues in the United States were established in the mid-to-late 19<sup>th</sup> century. Early labor negotiations consisted of each player being paid by the owner or manager on a per game basis, usually from a portion of ticket revenue. Over time owners and managers began to realize the moneymaking potential of professional sports, and not long after the players caught on as well. The first major legal battle between players and owners didn't occur until 1969 when Curt Flood of Major League Baseball's St. Louis Cardinals refused to report to the Philadelphia Phillies after being traded. Flood and the MLB Players' Union took their antitrust lawsuit to the Supreme Court, who eventually ruled in favor of the MLB. However the Supreme Court's decision led to the end of the reserve clause in 1975 and the start of free agency, which has since been adopted by all other major sports leagues in the United States.

Since Curt Flood's lawsuit, players have become more aware of their legal rights and have formed large and formidable players' unions and associations, one for each league. These unions work on the players' behalf to ensure that the players receive the compensation they deserve, or more realistically what the players believe they deserve in addition to other labor-related issues (e.g. rules governing drug testing, player pension funds, etc.). Due to the requirement for all players to join their respective union, team owners started using collective bargaining agreements to create rules that all players and teams must abide by. These agreements are contracts and thus must be renewed every 4-8 years. Although such contracts are designed to create peace and prosperity for all, it

also requires that negotiations occur periodically when new agreements need to be written. When there is a disagreement that cannot be resolved, a work stoppage occurs. All four of the major sports leagues in the United States, the National Football League, Major League Baseball, the National Basketball Association, and the National Hockey League, have had work stoppages in the last 25 years. These stoppages can have positive or negative effects on the strength of professional sports leagues or have few significant consequences. The goal of this study was to determine if work stoppages have effects on sports leagues, and if so, what are these effects and the consequences of these effects for franchises, players, and the leagues as a whole.

## Chapter 2: NHL Lockout 2004-2005

The 2004-2005 National Hockey League owners' lockout was officially announced on September 15, 2004, days before the start of the preseason schedule for the 2004-2005 season. The previous collective bargaining agreement had expired without an extension and negotiations had broken down, causing the owners to impose a lockout. The owners' main request was for a salary cap to bring down rising player salaries but the National Hockey League Players' Association refused to accept any proposal that included a salary cap. From the 1993-1994 season to the 2003-2004 season total players' salaries tripled, but league revenues did not grow at nearly that pace (Staudohar,23). Owners argued that they lost \$1.8 billion over the course of that decade (Staudohar,23). The league had an independent study done just before the lockout to confirm the owners' statements. The report by Arthur Levitt stated that teams were spending 76% of revenue

on players' salaries, although Forbes contends that this number is actually 66% (Ozanian and Badenhausen,21). Regardless of which numbers are most accurate, either percentage is much higher than all other major sports leagues in the United States. Coupled with the fact that the NHL was at best third among those leagues in revenues is enough cause for the owners' concern. After 310 days, 1,230 games lost, an estimated \$2 billion in revenue from tickets, media, sponsorships, and concessions lost, and an estimated \$1 billion in players' salaries lost, the lockout officially ended on July 13, 2005 (Staudohar,23).

Following the NHL lockout, rule changes were instituted by the league that radically altered the game on the ice, creating long-lasting effects to the league. The NHL eliminated the possibility of a game ending in a tie during the regular season and added a three player shootout to determine a winner should a standard five minute overtime not suffice. Other rules were discarded to reduce breaks in on-ice action and increase scoring chances. For example, passes between players were allowed to extend from one end of the ice to the other, "touch-up" offsides was implemented, and a greater emphasis was placed on the calling of penalties for infractions in which attacking skaters were obstructed or physically "grabbed" by opponents.

After these rule changes were instituted, NHL management focused on transforming the financial underpinnings of the league as a whole. Revenue sharing was introduced, such that the top 10 revenue-producing teams contributed a portion of their revenues to a fund from which the bottom 10 revenue-producing teams could draw at the end of the season. In the three seasons leading up to the lockout, as seen in Figure 1 below, the overall league operating income was negative each season and totaled

\$224,000,000, with 16 teams, 20 teams, and 16 teams having negative operating income respectively. In the season following the lockout the overall league operating income was \$125,100,000 and only eight teams had negative operating income. Though this new system did not ensure that all teams are profitable it is arguable that revenue sharing prevented a number of teams from considering relocation or contraction of the league as a whole.

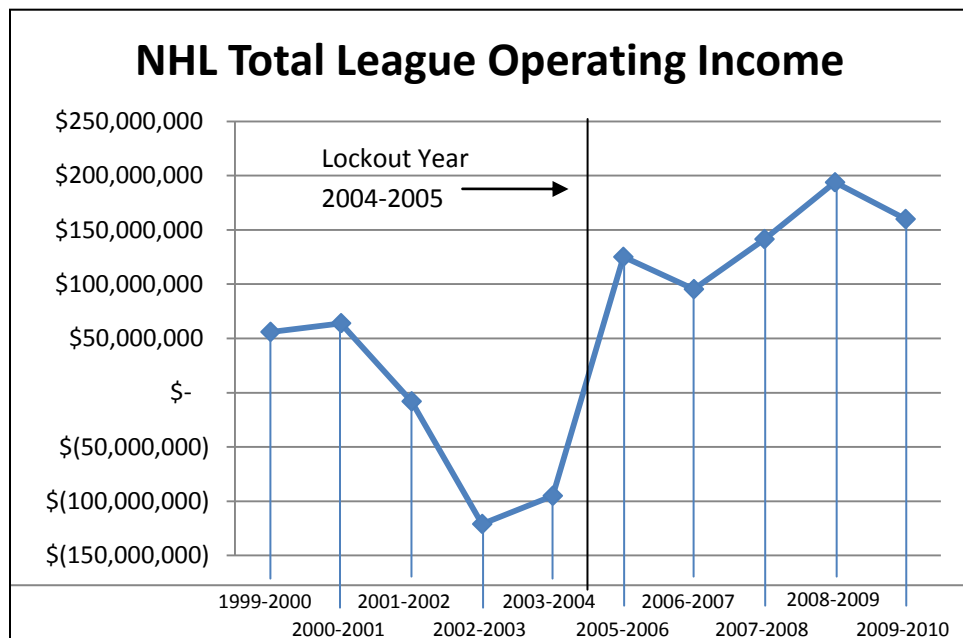


Figure 1 – Data from Ozanian and Badenhausen,21

Also contributing to the increased financial strength of the NHL after the lockout was the creation of a league-wide player salary cap, the “deal-breaker” that the NHL players’ association stated they would never accept. The salary cap is the total amount of money that a team can spend on its roster in salary and bonuses. The upper limit of the salary cap was agreed upon to be 54% of total league revenues with a minimum level of team salary expenditures set at 55% of the cap (for the 2005-2006 season the upper limit was \$39,000,000, and the lower limit was \$21,450,000) (Staudohar,23). For the 2010-

2011 season the upper limit of the salary cap increased to \$59,400,000 due to increased league revenues and, after changes in the wording for lower limit calculations, the lower limit was increased to \$40,800,000. As discussed previously revenues increased after the lockout and disparities in operating income between teams were reduced, which leads to the question of where much of the extra money came from. Due to the introduction of the salary cap players' salaries were greatly affected, most commonly in a negative way. In the 2003-2004 season the highest paid player by salary, Joe Sakic of the Colorado Avalanche, was paid \$18,000,000. Under the new collective bargaining agreement players could only be paid up to 20% of the total team salary cap, which was \$7,800,000 for the 2005-2006 season. As a consequence, upper echelon players lost nearly half of their potential salaries, whereas most players were not affected as negatively. Indeed, most mid-level players retained the same or nearly the same salary after the lockout and lower level players were affected positively by the salary cap. The league-wide minimum salary was \$175,000 for the 2003-2004 season, but was increased to \$450,000 after the lockout with mandated increases every two years (Staudohar,23). The league-wide minimum salary for the 2010-2011 season was \$500,000, nearly three times as much as just seven years earlier. Also with the creation of a mandated "floor" on team salaries teams that were spending relatively little on players' salaries were forced to spend more, usually via increases to the amount paid to all of their players.

Another addition to the new collective bargaining agreement was the institution of a players' escrow account to ensure that player compensation is an accurate reflection of league-wide revenues. Under the new collective bargaining agreement player compensation was limited to 54% of league revenues, but total revenues cannot be

predicted with 100% accuracy before a season starts. Thus the players' escrow account was created to keep this proportion valid. Players would deposit an adjustable percentage of their paychecks in an escrow account after each payment period. If at the end of the year player compensation is under 54%, the players receive compensatory funds from the account to create the agreed upon balance. In turn, if player compensation is over 54% the owners receive funds from the account to bring the ratio back to 54%.

Though many of the changes to the collective bargaining agreement favored owners, the players did receive a few benefits. One benefit required changes to the rules regarding free agency. Under the previous agreement players were only guaranteed free agency by the age of 31, meaning a player could spend over half of their career without the ability to choose which team they played for. The new agreement liberalized free agency and though it remained at the age of 31 for the 2005-2006 season, it decreased subsequently in the following seasons to 29 and then 27 years of age. This enabled players more freedom to choose which team they played for, in effect enabling players to attempt to gain their full market potential at an earlier age. As a consequence, teams would have to offer players with expiring contracts more money should they be interested in retaining their services. Although a player could play their entire career for one team, the new terms of free agency gave them more control of their careers and thus the total compensation that they could expect to receive. A final addition to the new collective bargaining agreement was the implementation of a drug-testing policy and enforcement program which has been studied and copied by other leagues around the world.

### Chapter 3: NHL Lockout 1994-1995

The 1994-1995 National Hockey League owners' lockout began on October 1, 1994, just days before the 1994-1995 season was set to begin. The owners decided to lockout the players until the players would agree to a new collective bargaining agreement, citing rising players' costs. The owners contended that players' salaries were increasing at a rate faster than that of league revenues and that owners were losing money as a result. The owners' main request was for the league to create a salary cap that would lower player costs as well as create more competition between large and small market teams. The players were against the idea of a salary cap, seeing as how it would decrease their salaries and limit the free market associated with free agency. The lockout lasted 103 days and was ended on January 13, 1995 with the passing of a new collective bargaining agreement.

As a result of the owners' hard stance on the salary cap issue, the players were forced to accept compromises on many additional issues in order to avoid a salary cap in the new agreement. These included minor changes to free agency, salary arbitration, and the creation of a rookie wage cap, all of which were in favor of the owners. Following the lockout the league created a 48 game season, down from 82 games, followed by a full playoff schedule. While the new agreement created some immediate stability and allowed the players to get back to work, there were long term ramifications of the lockout. The lack of a resolution on the salary cap issue led to the subsequent owners' lockout in 2004. Many of the owners and members of team management that were around for the 1994-1995 lockout cited the inability to solve the salary problem in 1994 as the main cause of the lockout in 2004 (RealClearSports,11). A final consequence was that two of

the eight Canadian teams eventually moved to the United States due to lack of public and fan support following the 1994-1995 lockout. Long considered the “hockey stronghold” where any team could always prosper, Canadian fans proved just as fickle as Americans following the 1994-1995 lockout. The Winnipeg Jets moved to Phoenix, AZ to become the Phoenix Coyotes following the 1995-1996 season. The Quebec Nordiques moved to Denver, CO to become the Colorado Avalanche following the 1994-1995 season.

#### Chapter 4: MLB Strike 1994-1995

The 1994-1995 Major League Baseball players’ strike began on August 12, 1994 in the middle of the 1994 season. The previous collective bargaining agreement expired on December 31, 1993 and both sides decided to continue with the 1994 season even though a governing agreement was not in hand. The owners were tired of losing money, an issue still under debate to this day, and decided that a salary cap, elimination of salary arbitration, and other minor changes were in the best interest of the game. The players did not see any benefit for themselves in these changes and rejected the owners’ proposal on July 18, 1994. The Major League Baseball Players’ Association leader Donald Fehr threatened that the players would go on strike on August 12, 1994 if a new proposal wasn’t created, and in the absence of new proposals from the owners the players went on strike. The rest of the 1994 season was cancelled, including the postseason and the 1994 World Series. This was the first season without a World Series since 1904 as well as the first time a North American sports league lost a postseason due to a work stoppage. After negotiations stretched throughout the winter and the beginning of spring, a new collective



bargaining agreement was reached 232 days later on April 2, 1995. The 1995 season was started a few weeks later and consisted of 144 games, down from 162. In the new agreement the owners were not able to achieve either of their main goals, as a salary cap and the end of salary arbitration both were vetoed by the players. The new agreement did include revenue sharing among teams, which allowed for struggling teams to receive a revenue boost that owners were pushing for, and a luxury tax to curb spending by high payroll teams.

Despite the good feelings from the completion of negotiations and the start of a new season, there were long-term consequences of the players' strike. Attendance, at a near record high in the 1994 season before the strike, fell drastically during the 1995 season. As seen in Figure 2 below, average attendance was at 31,285 fans per game in 1994. In 1995 average attendance dropped to 25,034 fans per game. In the following few years attendance increased by around 1,200 fans per year followed by a few years of fluctuating attendance. It was not until the 2006 season that average attendance reached the level it had been at in 1994.

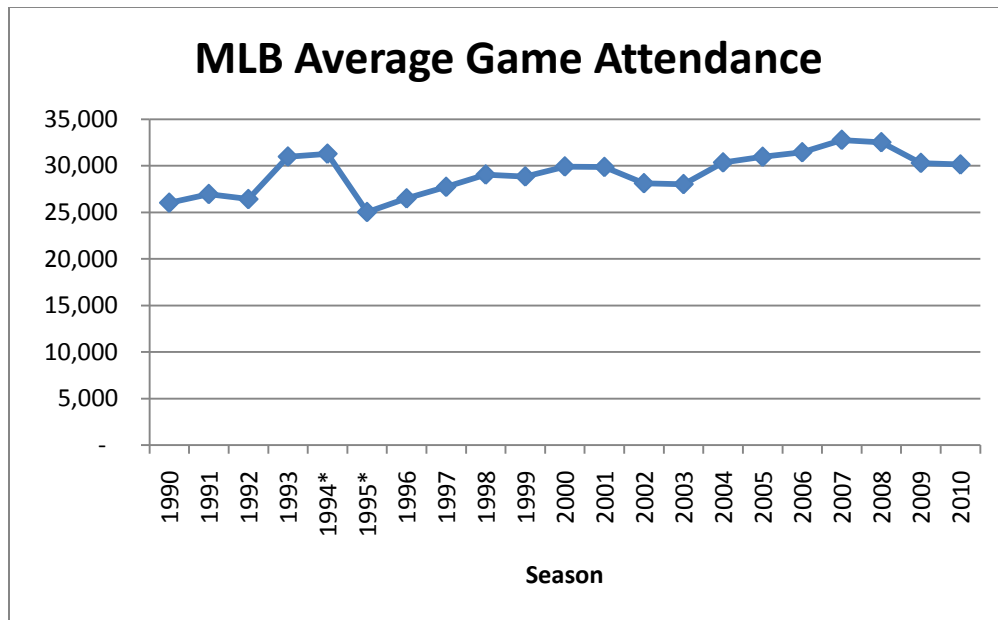


Figure 2 – Data from Rodney Fort,15

Along with the loss in fan attendance there was a loss in overall fan support, as seen in the reduction in television ratings in 1995 and the following seasons. Baseball has long been one of the Americas’ favorite sports, affectionately referred to as the “National Pastime”. Although the National Football League overtook Major League Baseball as Americans’ favorite in the 1970’s according to Gallup Polls, Major League Baseball remained solidly in second place. Figure 3 below shows that leading up to the 1994-1995 strike Major League Baseball was gaining popularity, rating as high as 21% of Americans’ favorite sport just four days before the strike began (Gallup,3). During the strike it rated just 16%, and following the end of the strike Major League Baseball’s popularity continued to gradually plummet. As of December 2005 Major League Baseball has been overtaken by the National Basketball Association and is currently in 3<sup>rd</sup> place among Americans’ favorite sports (Gallup,6).

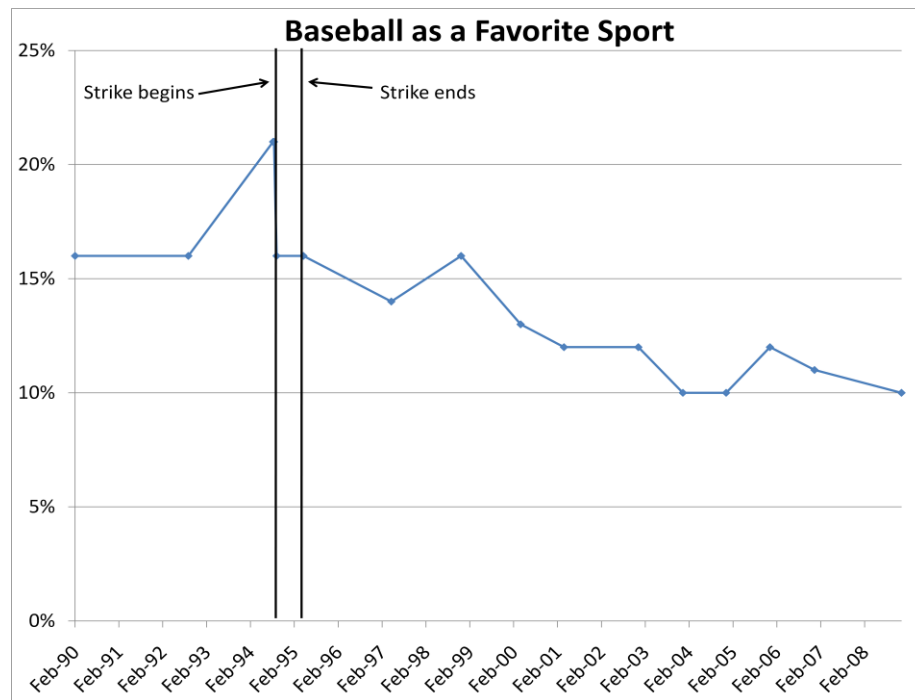


Figure 3 – Data from Gallup Polls, 6

Another long-lasting effect of the 1994-1995 strike was the impact on the stability of team operating incomes. As seen in Figure 4 below it wasn't until the 2001 season that overall team operating income found the stability it had enjoyed prior to the strike in 1994.

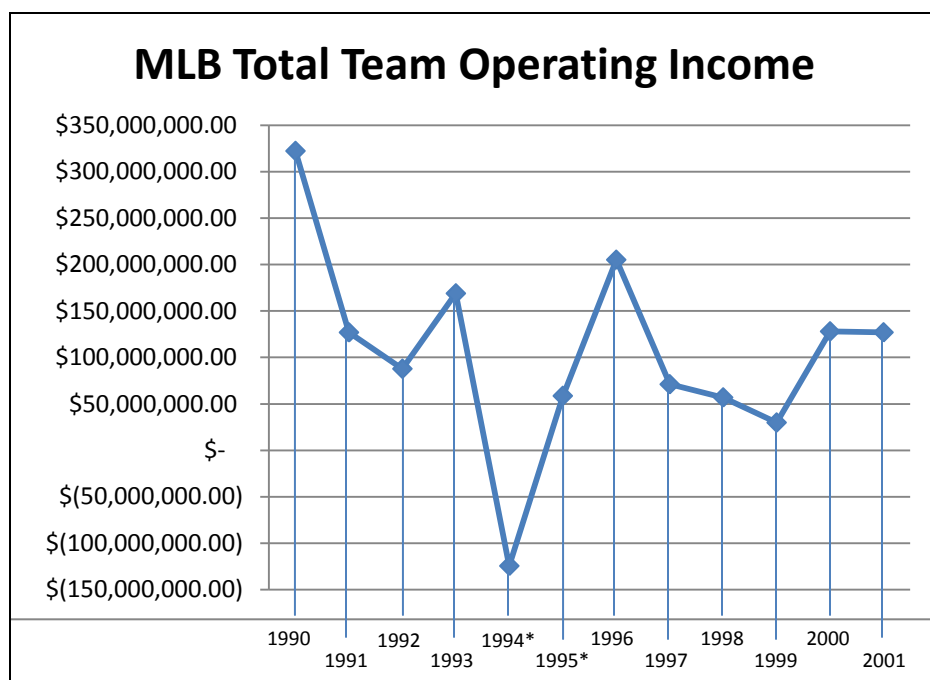


Figure 4 – Data from Rodney Fort, 15

A final effect of the 1994-1995 MLB strike was the damage done to the Montreal Expos franchise. The Montreal Expos, a small market team lacking a sustained history of success, had the best record in baseball at the beginning of the strike in 1994 at 74 wins and 40 losses. They were widely considered the favorite to win the World Series, a huge boost for a middling team, even though they had the second lowest payroll in the league. Following the end of the strike in 1995 the Montreal Expos were one of the hardest hit teams based on reductions in attendance and fan support. In each of the following years the team continued to lose money and fans. The Montreal Expos were eventually bought by Major League Baseball in 2001 and forced to move to Washington, D.C. in 2004, becoming the Washington Nationals.

## Chapter 5: NBA Lockout 1998-1999

The 1998-1999 National Basketball Association owners' lockout began on July 1, 1998 after the expiration of the previous collective bargaining agreement and in the absence of an approved extension. The owners' requests included a maximum salary that a single player could receive and a larger percentage of league revenues. The players' major request was to increase the league minimum salary. After 191 days of negotiations the lockout ended with a new collective bargaining agreement on January 6, 1999. The season started a few weeks later consisting of 50 games, down from 82. Both sides were able to come away with positive outcomes, as owners were able to convince players to accept maximum salaries of \$9-14 million depending on years in the league as well as a rookie pay scale (RealClearSports,10). Players were able to convince owners to accept a modest raise in the league minimum salary.

Though both sides came away from the lockout feeling victorious, there were enduring consequences of the 1998-1999 lockout. As seen in Figure 5 below league attendance was trending upward before the strike began in 1998. Average attendance was at 17,135 fans per game in the 1997-1998 season and it fell following the end of the strike in 1999. It was not until the 2004-2005 season that attendance reached its 1997-1998 levels, seven years later.

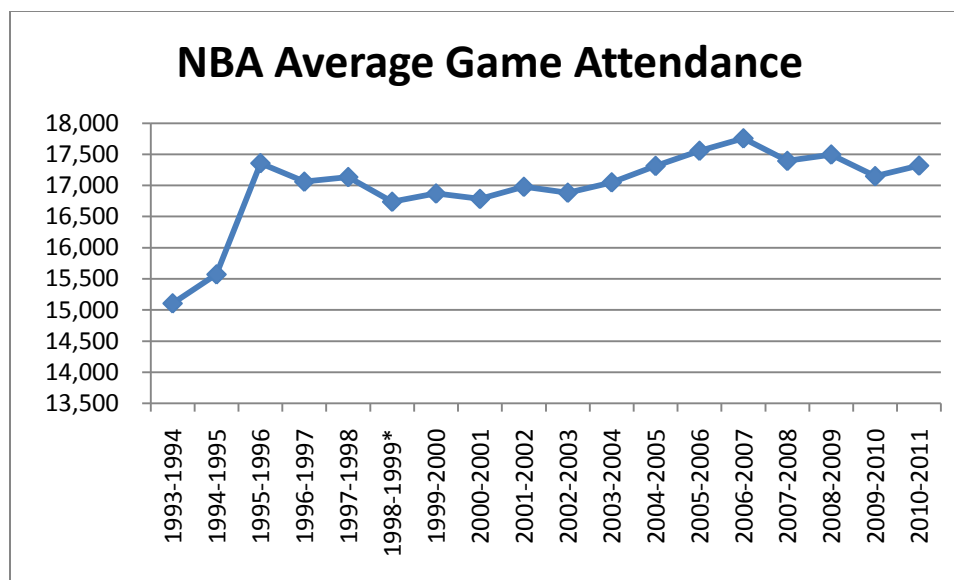


Figure 5 – Data from [www.apbr.org](http://www.apbr.org),8

As attendance fell so did TV ratings and overall league popularity. Similar to the immediate reduction in popularity Major League Baseball suffered following the 1994-1995 strike, the National Basketball Association's popularity also decreased immediately following the 1998-1999 lockout. Gallup reported that the NBA was 17% of Americans' favorite sport to watch in April 1997 (Gallup,4). In November 1998 that figure was reduced to 12%, although current polls indicate that the NBA has regained its stature with the influx of new talent such as LeBron James, Dwyane Wade, Kevin Durant, and Dwight Howard (Gallup,6). This group, as well as others, has the difficult role of filling the shoes of the greatest basketball player of all time and the greatest human casualty of the 1998-1999 lockout, Michael Jordan. Michael Jordan retired for a second time during the lockout and stayed away for a few years before returning from retirement for a second time. This may account for some of the decrease in attendance, TV ratings, and popularity, but overall fan displeasure accounts for the majority of the decrease.

## Chapter 6: Analysis and Results

After collecting data from the aforementioned strikes and lockouts, I combined the information in an Excel worksheet and analyzed the data. Below in Table 1 is an example of one team, the Atlanta Braves of Major League Baseball, from the Excel worksheet. The “Strength” factor was defined as either a “1” or a “2”, unless the franchise did not exist during that season in which case a “0” was used. A factor of “2” meant that the franchise was a strong franchise whereas a “1” meant that the franchise was a weak franchise. A franchise was able to change from strong to weak or vice versa over the course of the study, such as the Atlanta Braves did between the 1990 and 1991 seasons (see below). The “Strength” factor was calculated using franchise market size and strength, franchise fan loyalty, and win-loss records. Thus a strong franchise usually was in a large market, had a loyal fan base, and won 50% or more of its games most seasons. A weak franchise usually was in a small market, had a small fan base, and may or may not have won 50% or more of its games in most seasons. There are exceptions to these generalizations such as the Green Bay Packers who are situated in a city of less than 200,000 people but have one of the most loyal fan bases in all of sports and usually win many games, including the Super Bowl this past season. The “Stoppage?” factor was defined as a “0” for no work stoppage, “-1” for the season prior to a work stoppage, “1” for the season of a work stoppage, “2” for the season after a work stoppage, and “3” for the next season after a work stoppage.

<u>League</u>	<u>Team</u>	<u>Strength</u>	<u>Season</u>	<u>Stoppage?</u>	<u>Revenue</u>	<u>Operating Income</u>	<u>Average Attendance</u>
MLB	Atlanta Braves	1	1990	0	\$ 35,400,000	\$ 15,600,000	12,100
MLB	Atlanta Braves	2	1991	0	\$ 40,300,000	\$ (500,000)	26,422
MLB	Atlanta Braves	2	1992	0	\$ 50,700,000	\$ (9,000,000)	37,993
MLB	Atlanta Braves	2	1993	-1	\$ 79,000,000	\$ (1,400,000)	47,960
MLB	Atlanta Braves	2	1994	1	\$ 55,800,000	\$ (5,300,000)	44,548
MLB	Atlanta Braves	2	1995	1	\$ 60,700,000	\$ (2,900,000)	35,581
MLB	Atlanta Braves	2	1996	2	\$ 79,100,000	\$ (300,000)	35,818
MLB	Atlanta Braves	2	1997	3	\$ 119,600,000	\$ 18,200,000	42,771
MLB	Atlanta Braves	2	1998	0	\$ 142,700,000	\$ 16,400,000	41,492
MLB	Atlanta Braves	2	1999	0	\$ 155,200,000	\$ 18,300,000	40,554
MLB	Atlanta Braves	2	2000	0	\$ 145,500,000	\$ 7,700,000	39,865
MLB	Atlanta Braves	2	2001	0	\$ 160,020,000	\$ 9,450,000	34,858
MLB	Atlanta Braves	2	2002	0	\$ 163,000,000	\$ 10,000,000	32,141
MLB	Atlanta Braves	2	2003	0	\$ 156,000,000	\$ -	30,393
MLB	Atlanta Braves	2	2004	0	\$ 162,000,000	\$ 15,000,000	29,399
MLB	Atlanta Braves	2	2005	0	\$ 172,000,000	\$ 28,000,000	31,514
MLB	Atlanta Braves	2	2006	0	\$ 183,000,000	\$ 15,000,000	31,881
MLB	Atlanta Braves	2	2007	0	\$ 199,000,000	\$ 28,000,000	33,891
MLB	Atlanta Braves	2	2008	0	\$ 186,000,000	\$ 5,000,000	31,269
MLB	Atlanta Braves	2	2009	0	\$ 188,000,000	\$ 2,000,000	29,304
MLB	Atlanta Braves	2	2010	0	\$ 201,000,000	\$ 22,200,000	30,989

In my analysis I looked at the difference between strong and weak franchises in each league and how they perform in the years leading up to and following a work stoppage. The hypothesis before the analysis was that strong franchises would be able to recover in all three categories in less time than weak franchises in the same league. My analysis provided the results seen in the following Tables 2-10.



#### NHL Team Attendance

	Year Before Stoppage	Year after Stoppage
Weak Franchises	15,485	15,668
Strong Franchises	17,569	18,106

From my analysis I found that the 1994-1995 and 2004-2005 lockouts didn't have major effects on team attendance, with a  $p > 0.05$ . I also found that, as expected, stronger franchises had a greater average attendance than weaker franchises before and after the work stoppages.

#### NBA Team Attendance

	Year Before Stoppage	Year after Stoppage
Weak Franchises	16,340	15,832
Strong Franchises	19,219	19,594

From my analysis I found that the 1998-1999 lockout didn't have a major effect on team attendance, with a  $p > 0.05$ . I also found that, as expected, stronger franchises had a greater average attendance than weaker franchises both before and after the work stoppages.

### MLB Team Attendance

	Year Before Stoppage	Year after Stoppage
Weak Franchises	28,378	21,427
Strong Franchises	35,658	32,650

From my analysis I found that the 1994-1995 strike had a large negative effect on team attendance, with a  $p < 0.01$ . Weak franchises lost on average 6,951 fans per game after the strike, or 24.49% of their average attendance. In contrast, strong franchises lost on average 3,008 fans per game after the strike, or 8.44% of their average attendance. Thus, weak franchises were affected far more by the strike than strong franchises, although both were affected negatively.

### NHL Team Revenue

	Year Before Stoppage	Year after Stoppage
Weak Franchises	\$65.05 M	\$69.68 M
Strong Franchises	\$93.7 M	\$86 M

From my analysis I found that the 1994-1995 and 2004-2005 lockouts had a negative effect on strong franchises and a positive effect on weak franchises. Weak franchises gained \$4,630,000 in revenue on average after the lockouts compared to revenues before the lockouts, with a  $p < 0.01$ . Strong franchises lost \$7,700,000 in revenue on average after the lockouts compared to revenues before the lockouts, with a  $p < 0.01$ . Interestingly, this occurred despite attendance growth following the lockouts, as

previously shown. One potential source of both the strong franchises' losses and the weak franchises' gains is the implementation of revenue sharing following the 2004-2005 lockout. As described previously, strong franchises are usually the top revenue-producing franchises and thus these franchises would be required to give some of their revenue to the bottom revenue-producing franchises, generally the weaker franchises.

NBA Team Revenue

	Year Before Stoppage	Year after Stoppage
Weak Franchises	\$56.5 M	\$77.77 M
Strong Franchises	\$85.98 M	\$112 M

From my analysis I found that both weak and strong franchises increased their revenues following the 1998-1999 lockout. Weak franchises saw their revenues increase by \$21,270,000 on average, or by 37.64% of their average revenue. Strong franchises saw their revenues increase by \$26,020,000 on average, or by 30.26% of their average revenue. This may reflect that the 1998-1999 lockout did not cause a cancellation of the playoffs following the regular season, as compared to the 1994-1995 MLB strike and the 2004-2005 NHL lockout. Why might this be the case? Many casual fans do not follow their team avidly during the regular season, yet they “tune in” and buy tickets during the playoffs because of the increased energy, excitement, and importance of each game.

### MLB Team Revenue

	Year Before Stoppage	Year after Stoppage
Weak Franchises	\$53.88 M	\$41.84 M
Strong Franchises	\$80.47 M	\$68.4 M

From my analysis I found that the 1994-1995 strike had a significant negative effect on both weak and strong franchises' revenues, with a  $p < 0.01$ . Weak franchises lost \$12,040,000 in revenue on average, while strong franchises lost \$12,070,000 in revenue on average. Though both weak and strong franchises lost nearly the same amount of revenue following the strike, weak franchises were more affected because their loss accounted for 22.35% of revenue compared to 15% for strong franchises.

### NHL Team Operating Income

	Year Before Stoppage	Year after Stoppage
Weak Franchises	-\$5.35 M	\$1.19 M
Strong Franchises	\$1.2 M	\$9.3 M

From my analysis I found that both weak and strong franchises were able to improve their operating income following the 1994-1995 and 2004-2005 lockouts. This suggests that cost cutting measures, such as lowering players' salaries, were effective in increasing teams' profits.

#### NBA Team Operating Income

	Year Before Stoppage	Year after Stoppage
Weak Franchises	\$2.76 M	\$1.68 M
Strong Franchises	\$16.59 M	\$16.0 M

From my analysis I found that the 1998-1999 lockout did not have much of an effect on teams' operating income, with  $p < 0.05$ . This is interesting considering the large increases in both weak franchises and strong franchises' revenues, suggesting that players may have benefited from the lockout through increased salaries.

#### MLB Team Operating Income

	Year Before Stoppage	Year after Stoppage
Weak Franchises	\$3.73 M	-\$1.16 M
Strong Franchises	\$10.18 M	\$8.97 M

From my analysis I found that similar to attendance and team revenues, the 1994-1995 strike had a negative effect on teams' operating income, with  $p < 0.01$ . Though weak franchises went from positive to negative operating income following the strike and strong franchises decreased their operating income, these losses were not as large as the previously shown reductions in team revenues. This suggests that cost cutting may have occurred, most likely by decreasing players' salaries.

## Chapter 7: Conclusions

From the results of my analysis I offer the following conclusions. First, the effect of a strike or lockout on the subsequent strength of a league is not uniform. Second, Major League Baseball suffered the most from the 1994-1995 strike of the four work stoppages studied. League average attendance took 12 seasons to recover from the 1994-1995 strike, and league average operating income took seven seasons to reach its previous levels of stability. Overall popularity of Major League Baseball has been in a steady decline since the beginning of the strike in 1994, and Major League Baseball has been reduced from the second favorite sport in America to third in fan polls. The reason for this dramatic result as compared to other work stoppages studied could be the rise in high-action sports in the early 1990's. Baseball has long been viewed as a slow-paced, drawn out game meant for casual fan involvement with few thrilling moments per game. Fast-paced sports such as ice hockey, basketball, and extreme sports such as skateboarding, snowboarding, and surfing were gaining national exposure and popularity due to the constant excitement and high energy levels. The cancellation of the postseason and the World Series took away any potential interest for the casual fan that would usually start paying attention at that time. Established sports such as baseball were slowly losing market share to these new competitors, and when baseball didn't have any output for nearly eight months fans left to go to other forms of entertainment in droves.

Third, with the exception of the 1998-1999 NBA lockout, team operating income did not decline as much as team revenue, suggesting that players' salaries must have been affected negatively following each studied work stoppage. Lastly, independent of the league analyzed the data suggest that the players lose the most as a result of a strike or

lockout. Though players and owners are intertwined in a business relationship in which both sides are dependent on one another, owners generally gain their income through other means. Owners are not dependent on the league for their personal wealth and thus can continue to live and prosper without games and seasons. On the other hand player income is based largely on their contracts, with the exception of the top 1% who may attract lucrative endorsement deals and are therefore not as dependent on contract salaries. With this knowledge owners are more willing to toughen their negotiating stance until they get what they desire, which is usually lower players' salaries. Sean Burke, an NHL goaltender, stated at the end of the 2004-2005 lockout, "I don't think the deal that we're going to get would have been ratified last summer. But I just think we've been worn down to the point where at this stage the deal would really have to be incredibly bad for the guys not to vote it in. At least that's the sense I'm getting."

## References

1. "2010 MLB Attendance - Major League Baseball - ESPN." *ESPN: The Worldwide Leader In Sports*. Web. <[http://espn.go.com/mlb/attendance/\\_year/2010](http://espn.go.com/mlb/attendance/_year/2010)>.
2. "2010-2011 NHL Attendance - National Hockey League - ESPN." *ESPN: The Worldwide Leader In Sports*. Web. <<http://espn.go.com/nhl/attendance>>.
3. "Baseball Fan Numbers Steady, But Decline May Be Pending." *Gallup.Com - Daily News, Polls, Public Opinion on Government, Politics, Economics, Management*. Web. <<http://www.gallup.com/poll/6745/Baseball-Fan-Numbers-Steady-Decline-May-Pending.aspx>>.
4. "Football Favorite Sport for American Fans." *Gallup.Com - Daily News, Polls, Public Opinion on Government, Politics, Economics, Management*. Web. <<http://www.gallup.com/poll/2959/Football-Favorite-Sport-American-Fans.aspx>>.
5. "Football Reaches Historic Popularity Levels in Gallup Poll." *Gallup.Com - Daily News, Polls, Public Opinion on Government, Politics, Economics, Management*. Web. <<http://www.gallup.com/poll/26188/Football-Reaches-Historic-Popularity-Levels-Gallup-Poll.aspx>>.
6. "Football Remains Runaway Leader as Favorite Sport." *Gallup.Com - Daily News, Polls, Public Opinion on Government, Politics, Economics, Management*. Web. <<http://www.gallup.com/poll/113503/football-remains-runaway-leader-favorite-sport.aspx>>.
7. "More Americans Are Fans of Pro Football Than Any Other Sport." *Gallup.Com - Daily News, Polls, Public Opinion on Government, Politics, Economics, Management*. Web. <<http://www.gallup.com/poll/1786/more-americans-fans-pro-football-than-any-other-sport.aspx>>.
8. "NBA Home Attendance Totals." *Association for Professional Basketball Research*. Web. <<http://www.apbr.org/attendance.html>>.
9. "RealClearSports - Top 10 Work Stoppages in Sports - 1. 1994 MLB Strike." *RealClearSports: Sports News, Opinions & Analysis*. Web. <[http://www.realclearsports.com/lists/work\\_stoppages\\_in\\_sports/1994\\_mlb\\_strike.html?state=stop](http://www.realclearsports.com/lists/work_stoppages_in_sports/1994_mlb_strike.html?state=stop)>.



10. "RealClearSports - Top 10 Work Stoppages in Sports - 5. 1998 NBA Lockout." *RealClearSports: Sports News, Opinions & Analysis*. Web. <[http://www.realclearsports.com/lists/work\\_stoppages\\_in\\_sports/1998\\_nba\\_lockout.html?state=stop](http://www.realclearsports.com/lists/work_stoppages_in_sports/1998_nba_lockout.html?state=stop)>.
11. "RealClearSports - Top 10 Work Stoppages in Sports - 9. 1994 NHL Lockout." *RealClearSports: Sports News, Opinions & Analysis*. Web. <[http://www.realclearsports.com/lists/work\\_stoppages\\_in\\_sports/1994\\_nhl\\_lockout.html?state=stop](http://www.realclearsports.com/lists/work_stoppages_in_sports/1994_nhl_lockout.html?state=stop)>.
12. "The Business Of Football - Forbes.com." *Information for the World's Business Leaders - Forbes.com*. Web. <[http://www.forbes.com/2010/08/25/most-valuable-nfl-teams-business-sports-football-valuations-10\\_land.html](http://www.forbes.com/2010/08/25/most-valuable-nfl-teams-business-sports-football-valuations-10_land.html)>.
13. "USATODAY.com - NHL Lockout Chronology." *News, Travel, Weather, Entertainment, Sports, Technology, U.S. & World - USATODAY.com*. 13 July 2005. Web. <[http://www.usatoday.com/sports/hockey/nhl/2005-07-13-lockout-chronology\\_x.htm](http://www.usatoday.com/sports/hockey/nhl/2005-07-13-lockout-chronology_x.htm)>.
14. Andrew. "NHL Average Attendance since 1989-90." *Dallas Stars Blog*. Web. <[http://www.andrewsstarspage.com/index.php/site/comments/nhl\\_average\\_attendance\\_since\\_1989\\_90/118-2008-09](http://www.andrewsstarspage.com/index.php/site/comments/nhl_average_attendance_since_1989_90/118-2008-09)>.
15. Fort, Rodney. "Econ 330 Syllabus." *Income and Expenses*. Web. <<http://www.rodneyfort.com/SportsData/MLB/MLBIncomeExpense/MLBIncomeExpense.html>>.
16. Fort, Rodney. "NFLAttendIndex." Web. <[www.rodneyfort.com/SportsData/NFL/NFLAttendance/NFLAttendIndex.xls](http://www.rodneyfort.com/SportsData/NFL/NFLAttendance/NFLAttendIndex.xls)>.
17. Ozanian, Michael K. "Business of Basketball." *Forbes.com*. Web. <<http://blogs.forbes.com/mikeozanian/2011/01/26/the-nbas-most-valuable-teams-2/>>.
18. Ozanian, Michael K. "The Business Of Baseball, 2011." *Forbes.com*. Web. <[http://www.forbes.com/lists/2011/33/baseball-valuations-11\\_land.html](http://www.forbes.com/lists/2011/33/baseball-valuations-11_land.html)>.
19. Ozanian, Michael K., "Fields of Debt," *Forbes Magazine*, December 15, 1997.
20. Ozanian, Michael K., "Too Much to Lose," *Forbes Magazine*, June 12, 2000.
21. Ozanian, Michael K., and Kurt Badenhausen. "The Business Of Hockey, 2010." *Information for the World's Business Leaders - Forbes.com*. Web. <[http://www.forbes.com/lists/2010/31/hockey-valuations-10\\_land.html](http://www.forbes.com/lists/2010/31/hockey-valuations-10_land.html)>.

22. Rosentraub, Mark S. "Are Public Policies Needed to Level the Playing Field Between Cities And Teams?" *Journal of Urban Affairs* 21.4 (1999): 377-95. Print.
23. Staudohar, Paul D. "The Hockey Lockout of 2004-05." *Monthly Labor Review*. Dec. 2005. Web. <<http://www.bls.gov/opub/mlr/2005/12/art3full.pdf>>.